

# Doing Business with NETL



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*Morgantown, WV*  
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National Energy Technology Laboratory



Office of Fossil Energy



# Our Mission

**Implement a research, development, and demonstration program to resolve the environmental, supply, and reliability constraints of producing and using fossil resources**



# Partnering Mechanisms

- **Cooperative Agreements**
- **Grants**
- **Contracts**
- **Cooperative Research &  
Development Agreement (CRADA)**



# **Cooperative Research and Development Agreements (CRADAs)**

- **Agreement to work collaboratively between the Federal Government and the private sector**
- **No federal funds are transferred to the private sector**
- **Private sector funding can be transferred to the Government**
- **Availability of exclusive license to patented inventions developed under a CRADA**
- **Protection of CRADA data from disclosure for up to 5 years**



# NETL “Partnership Facilities”

- NETL oversight and objective evaluation
- Collaborative access by universities, contractors and small businesses

## Facilities

- Hydrogen membrane test facility
- Modular CO<sub>2</sub> capture facility
- CO<sub>2</sub> sequestration flow laboratory
- SimVal combustor
- Gas hydrate laboratory
- Mercury capture and measurement facility
- Turbine / fuel cell hybrids research facility
- Fuel cell test facility



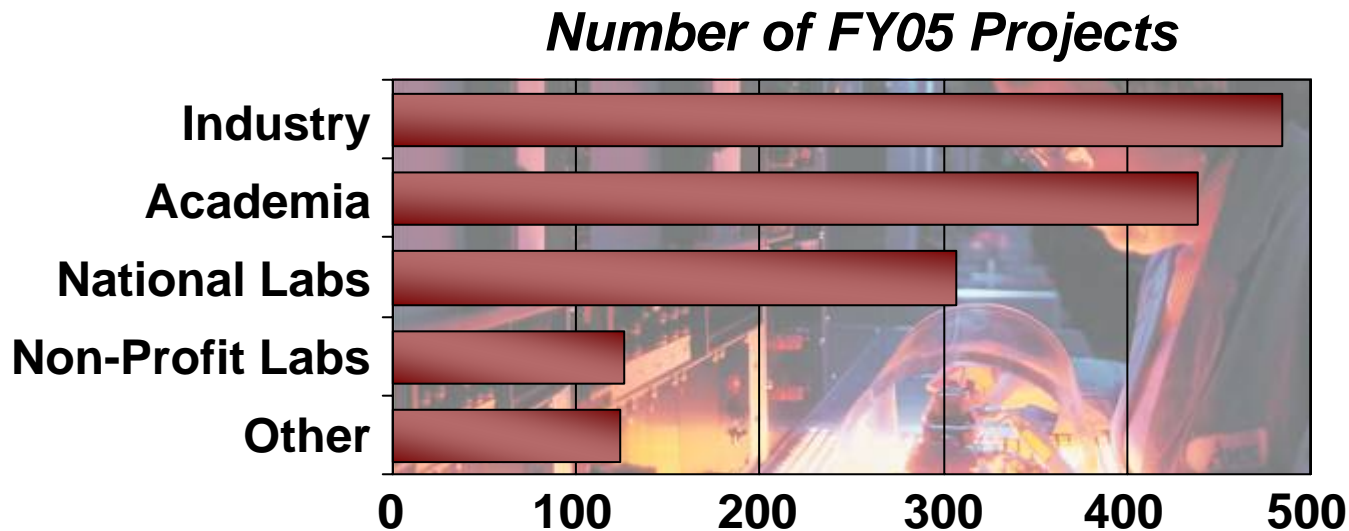
# Partnering Opportunities

- **Funding Opportunity Announcements**
  - Targeted Solicitations
  - University Coal Research (UCR)
  - Historically Black Colleges and Universities (HBCU) / Other Minority Institutions (OMI)
- **Experimental Program to Stimulate Competitive Research (EPSCoR)**
- **Oak Ridge Institute for Science & Education**
- **Unsolicited Funding Applications**

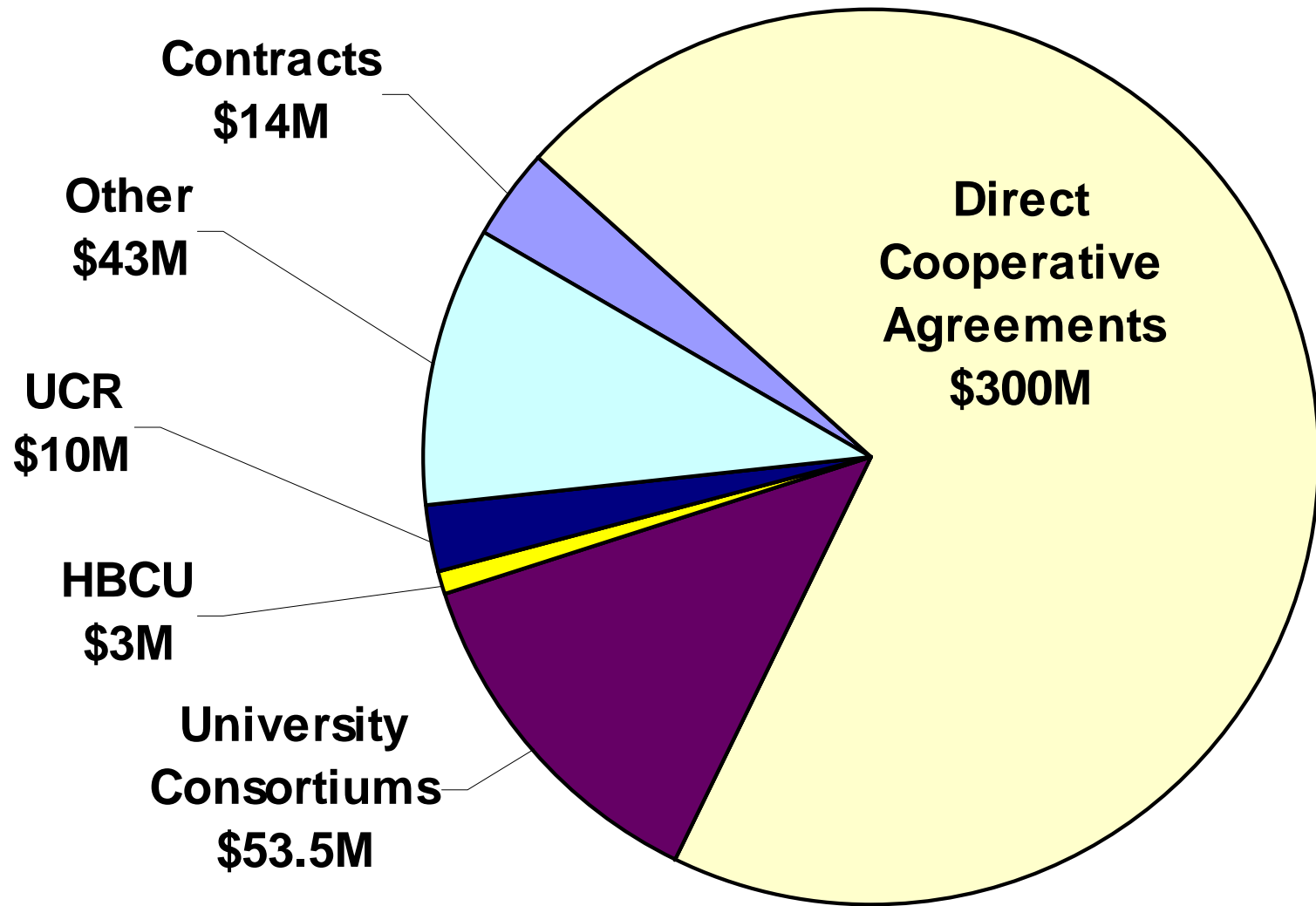


# University Contributions to NETL Programs

- Over 400 active projects between NETL and Institutions of Higher Education
- Total cost of these projects is over \$500 million
  - 70% of this will be provided by The Department of Energy

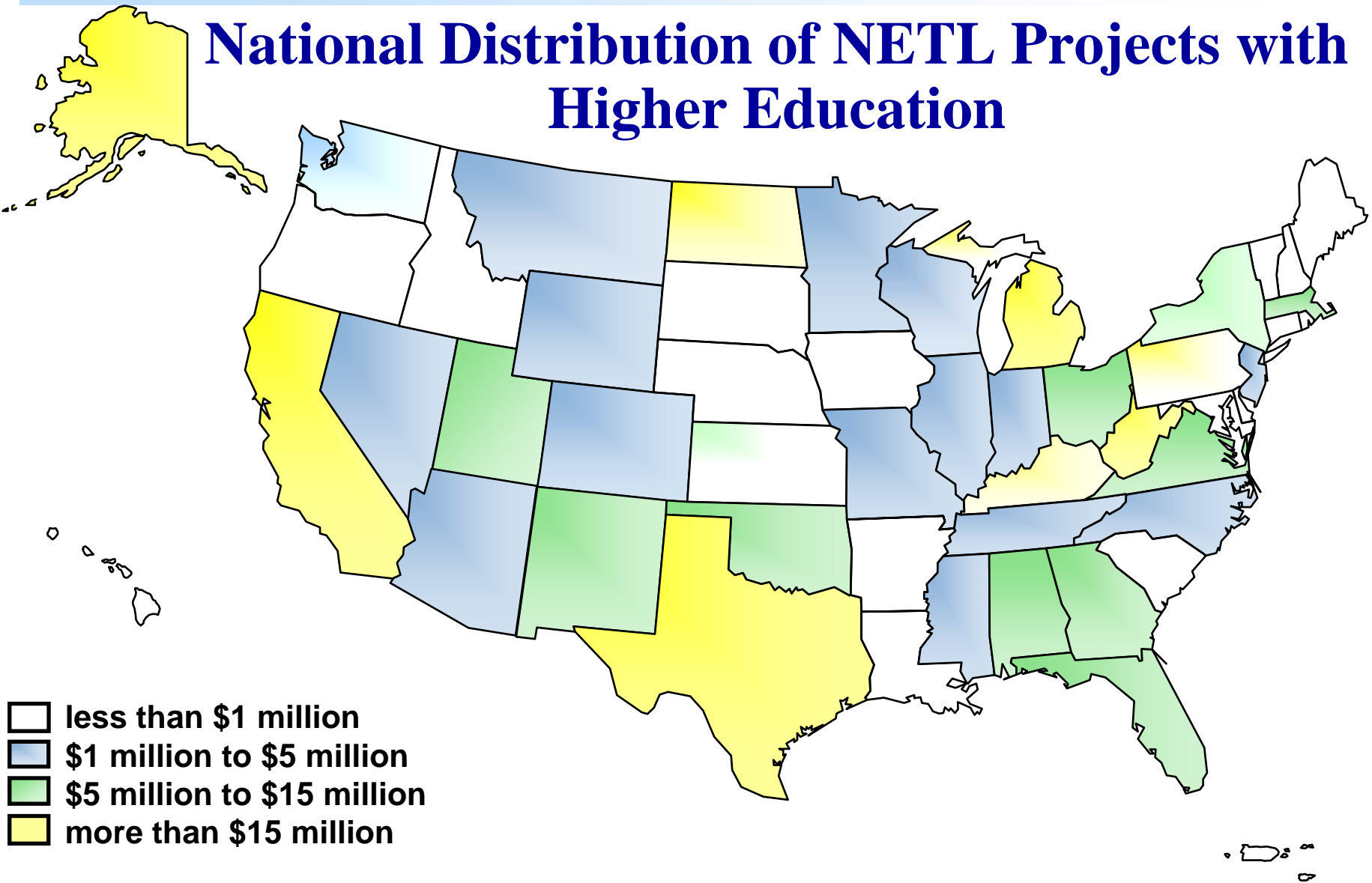


# Active Higher Education Projects with NETL





# National Distribution of NETL Projects with Higher Education

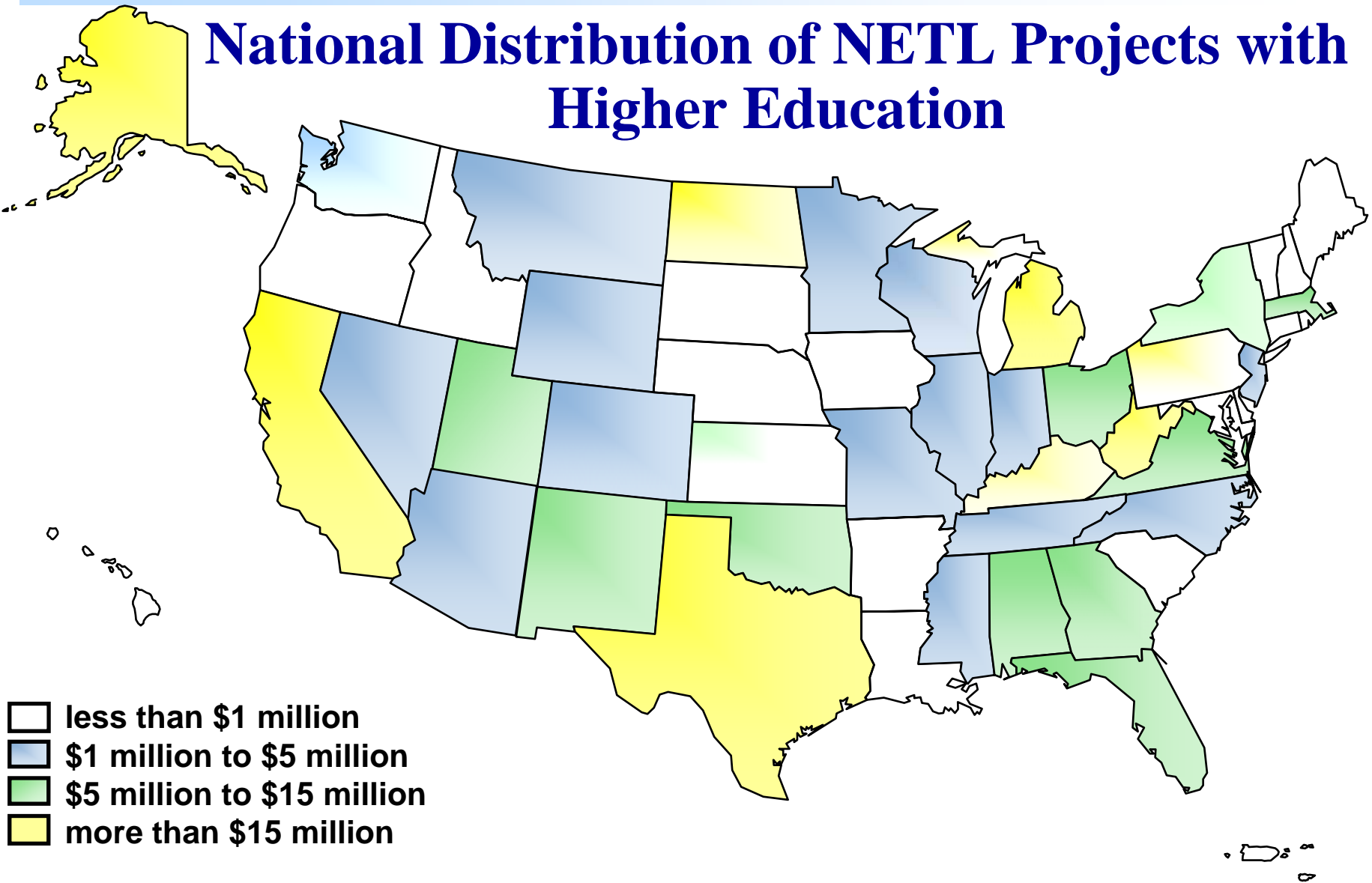


# EPSCoR grant for WVU Institute of Technology

- Working with NETL, researchers at WVU Tech have created adaptive neural network controllers for the “standpipe” section of a Circulating Fluidized-Bed (CFB)
- This EPSCoR grant will contribute \$15,000 per year for the next 3 years to a new project with a goal of extending these results to real-time modeling of the standpipe
- Eventually this real-time modeling could be applied to the entire CFB system and would be a major advance in intelligent control

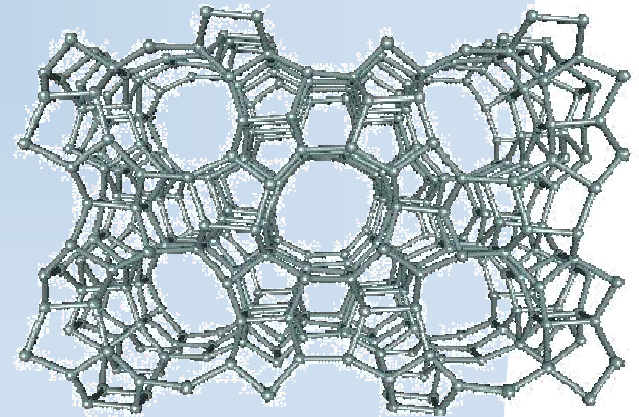


# National Distribution of NETL Projects with Higher Education

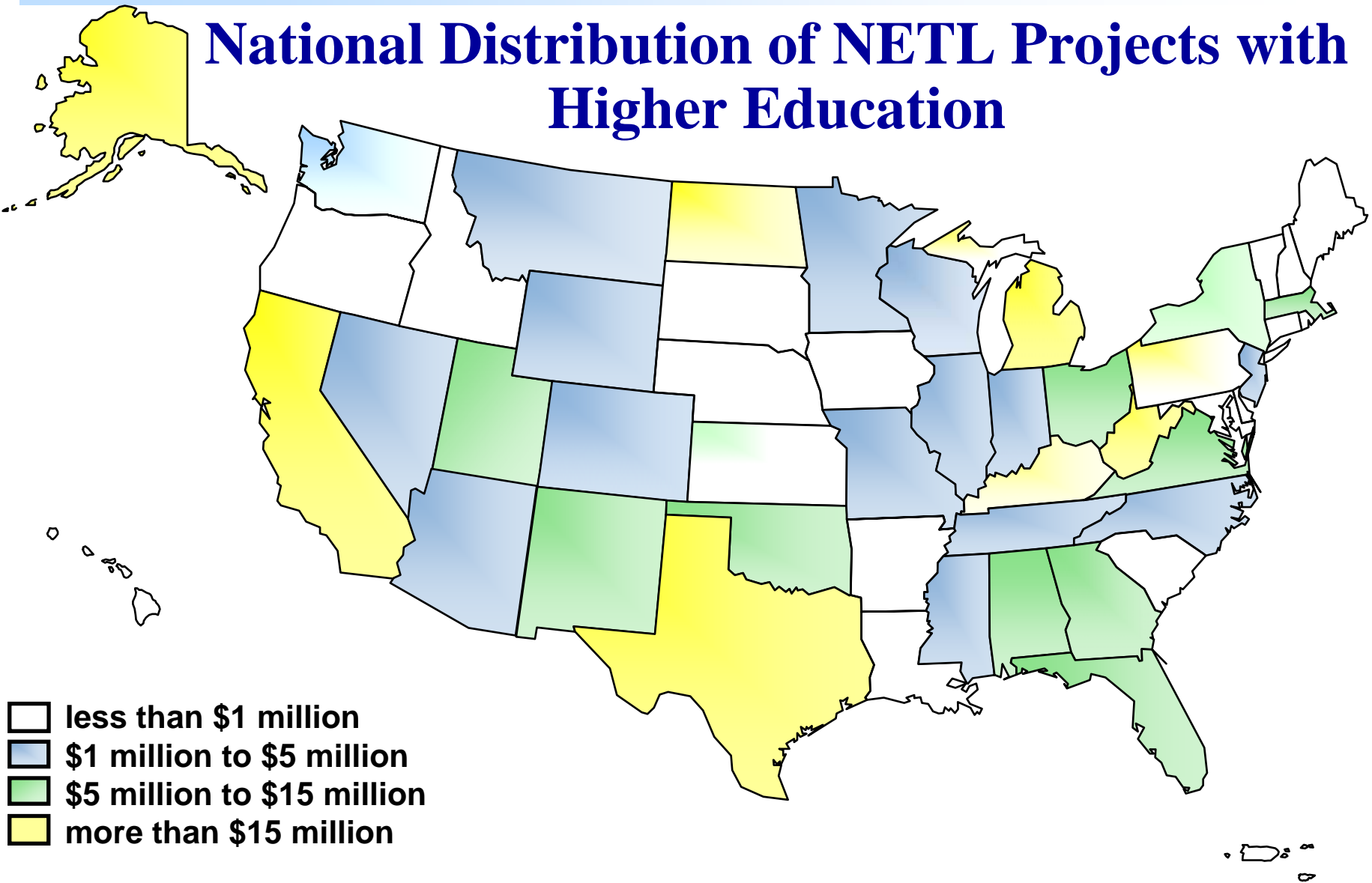


# University of Colorado Zeolite Membranes

- Laboratory experimentation to evaluate zeolite membranes capable of highly selective separation of hydrogen from other light gases, e.g., CO<sub>2</sub>, CO, and water vapor
- Thin, defect-free, 0.3-0.4 nm pore diameter membranes using atomic layer deposition technique to obtain high flux
- Post treatment methods achieved selectivity and pore sizes
- Flux enhancements needed



# National Distribution of NETL Projects with Higher Education

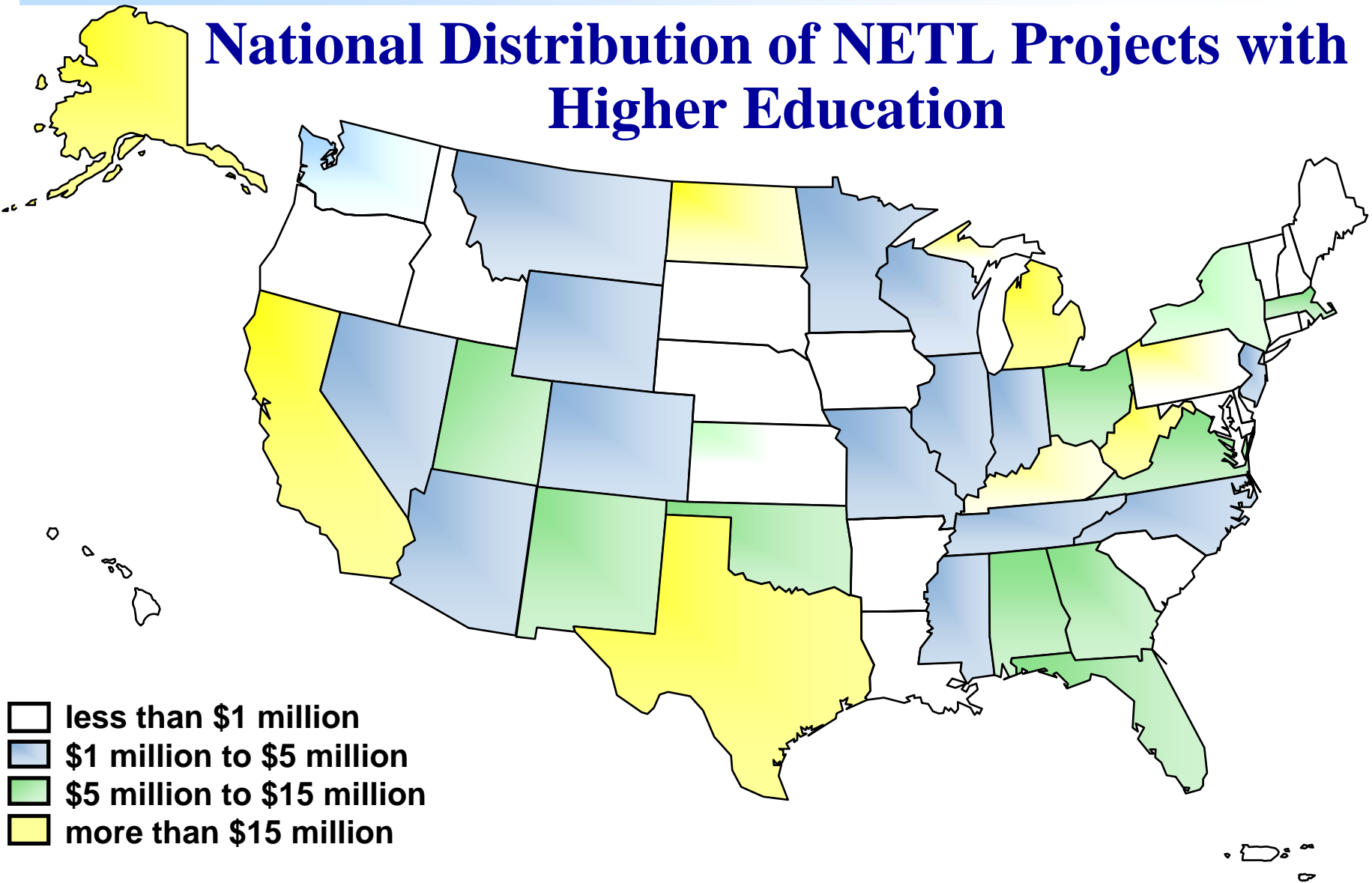


# University of Kentucky Research Foundation

- **UK Research Foundation recently signed an agreement to begin a \$9 million cost-sharing project under the Clean Coal Power Initiative (CCPI) program**
- **The research team will build a coal utilization byproduct beneficiation plant on the grounds of the Ghent Power Station in Ghent, KY**
  - The project will demonstrate an advanced process to separate unburned carbon from power plant ash or ash ponds and recycle it for fuel



# National Distribution of NETL Projects with Higher Education



# The Stripper Well Consortium

- **Established as a cooperative agreement between the DOE and Pennsylvania State University**
- **The Stripper Well Consortium has delivered six new deployment-ready applications in just four years**
  - These could extend the life of more than 650,000 wells
  - They deliver almost 15% of America's domestic oil & 8% of natural gas production
- **The Consortium has been active in advancing more than 55 additional technologies**





# Applying for NETL Funded Opportunities

- Review current Solicitations and Funding Opportunity Announcements
- Application Instructions
- Free email notification of new opportunities

**NETL Electronic Business Center**

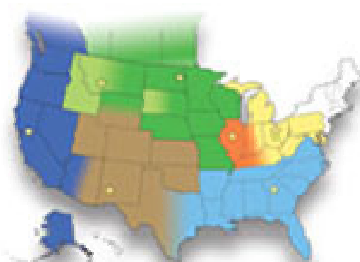
**[www.NETL.doe.gov](http://www.NETL.doe.gov)**





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## TOP NEWS STORIES



### DOE Celebrates Success of Regional Carbon Sequestration Partnerships

A report released today by the Department of Energy details the success of the Regional Carbon Sequestration Partnerships in laying the groundwork for field testing and verifying carbon sequestration technologies in the near term. [Read More!](#)

**TECHNOLOGY AREAS**



[Strategic Center for Natural Gas & Oil](#)

[Strategic Center for Coal](#)

[Office of Science, Technology & Analysis](#)

[Office of Advanced Initiatives](#)

### DOE-Heavy Oil Potential Key to Alaskan North Slope Oil Future

Alaska's North Slope boasts a massive heavy oil resource that someday could underpin the survival of one of the Nation's most critical oil-producing provinces and research funded by the Department of Energy may provide the key to unlocking this vast but, to date, largely intractable oil resource. [Read More!](#)

### DOE Sponsored Methane Hydrate Research Cruise Departs on Month Long Expedition in Gulf of Mexico

On April 17th a semi-submersible drilling vessel entered the Gulf of Mexico beginning a 35-day methane hydrate research voyage. During the expedition, researchers will collect drilling, log-ging, and coring data from deep well pairs in the Keathley Canyon and Atwater Valley locations. [Read More!](#)

[NETL's Microhole Program is profiled in a special report in Oil & Gas Journal](#)

## SPECIAL ANNOUNCEMENTS

- [Energy Department Announces Five Research Projects to Improve Mining Efficiency](#)
- [Regional Carbon Sequestration Partnerships Phase I Accomplishments](#) [PDF-



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## **Business Opportunities:**

### **Solicitations**

- [Business Alert Registration](#)
- [Solicitations/Funding Opportunity Announcements](#)
- [Notice of Intent to Purchase](#)
- [National Lab Call for Proposals](#)
- [Site Support Contractor Info.](#)  
[Electronic Reading Room](#)
- [Site Security Services](#)  
[Electronic Reading Room](#)

### **Technology Transfer**

- [Cooperative Research & Development Agreement \(CRADA\)](#)
- [Patents/Licensing Agreements](#)
- [Partnership Ombudsman](#)

### **Available Property**

- [Personal Property Sales Program](#)
- [Energy Related Lab. Equipment \(ERLE\) Grant Program](#)
- [Math and Science Equipment Gift Program](#)

### **Points of Contact**

- [NETL POC](#)

## **How to Do Business with Us:**

### **Financial Assistance**

- [How to Submit Applications](#)
- [Financial Assistance Rules 10CFR600](#)
- [DOE Applicant and Recipient Page](#)
- [Civil Rights Compliance](#)
- [Financial Assistance Forms](#)

### **Acquisition**

- [Federal Acquisition Regulations \(FAR\)](#)
- [DOE Acquisition Regulations \(DEAR\)](#)
- [Guide for Preparation of Cost Proposals](#)
- [Acquisition Forms](#)
- [Definitions](#)

### **Unsolicited Proposals - How to Submit**

### **Other Information**

- [Contractor's Property Handbook](#)  
[PDF-607 KB]

# Concluding Remarks

- **Majority of Partnerships through Financial Assistance**
- **NETL Focus is on Applied Research**
- **Important to Understand Industry Needs**
- **Competitive Solicitations the Norm**
  - Follow Directions/Instructions
  - Understand Evaluation Factors
  - Be Clear & Concise
  - Provide Complete Explanations

